Attorney Docket No. B45310

International Application No. PCT/EP03/06095

International Filing Date: June 6, 2003

In the Claims:

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1. (Original) An immunogenic composition comprising a xenogeneic P501S polypeptide or a xenogeneic P501S-encoding polynucleotide, or an immunogenic fragment thereof; and a pharmaceutically acceptable carrier.

- (Currently Amended) An immunogenic composition as claimed in claim 1 wherein the xenogeneic P501S polypeptide or immunogenic fragment thereof <u>comprises</u> is selected from the group comprising SEQ ID NO:1 or SEQ ID NO:3 or SEQ ID NO:10.
- (Currently Amended) An immunogenic composition as claimed in claim 1 wherein the xenogeneic P501S-encoding polynucleotide or immunogenic fragment comprises is selected from the group comprising SEQ ID NO:2 or SEQ ID NO:4 or SEQ ID NO:11.
- (Currently Amended) An immunogenic composition as claimed in <u>claim 1</u> any of elaims 1 to 3 which additionally comprises a TH-1 inducing adjuvant.
- 5. (Currently Amended) An immunogenic composition as claimed in claim 4 in which the TH-1 inducing adjuvant <u>comprises</u> is selected from the group of adjuvants comprising: 3D-MPL, QS21, an immunostimulatory CpG oligonucleotide, a mixture of QS21 and or cholesterol or a combination of one or more of any of these adjuvants.
- 6. (Original) An immunogenic composition comprising an effective amount of antigen presenting cells, modified by in vitro loading with a xenogeneic P501S polypeptide or immunogenic fragment thereof, or genetically modified in vitro to express a xenogeneic P501S polypeptide and a pharmaceutically effective carrier.
- 7. (Currently Amended) A pharmaceutical composition comprising the An immunogenic composition as claimed in claim 1 any of claims 1 to 6 for use in medicine.
- 8. (Currently Amended) A process for the production of an immunogenic composition as claimed in claim 1 any of claims 1 to 7, comprising admixing a xenogeneic P501S

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polypeptide or a xenogeneic P501S-encoding polynucleotide with a suitable adjuvant, diluent or other pharmaceutically acceptable carrier.

- 9. (Currently Amended) An isolated polypeptide comprising an amino acid sequence which has at least 92% identity to the amino acid sequence of SEQ ID NO:1 over the entire length of of-SEQ ID NO:1.
- 10. (Original) An isolated polypeptide as claimed in claim 9 in which the amino acid sequence has at least 95% identity to SEQ ID NO:1.
- 11. (Original) The polypeptide as claimed in claim 10 comprising the amino acid sequence of SEQ ID NO:1.
- 12. (Original) The isolated polypeptide of SEQ ID NO:1.
- 13. (Currently Amended) A polypeptide comprising an immunogenic fragment of a polypeptide as claimed in <u>claim 9 any one of claims 9 to 12</u> in which the immunogenic activity of the immunogenic fragment is substantially the same as the polypeptide of SEQ ID NO:1.
- 14. (Currently Amended) A polypeptide as claimed in <u>claim 9</u> any of claims 9 to 13 wherein said polypeptide is part of a larger fusion protein.
- 15. (Currently Amended) An isolated polynucleotide encoding a polypeptide as claimed in claim 9 any of claims 9 to 14.
- 16. (Original) The isolated polynucleotide of claim 15, comprising the sequence of SEQ ID NO:2.
- 17. (Original) An isolated polynucleotide comprising a nucleotide sequence encoding a polypeptide that has at least 92% identity to the amino acid sequence of SEQ ID NO:2, over the entire length of SEQ ID NO:2; or a nucleotide sequence complementary to said isolated polynucleotide.
- 18. (Currently Amended) The isolated polynucleotide of claim 15 as defined in any one of claims 15 to 17 in which the identity of said polynucleotide to SEQ ID NO:1 is at least 95%.

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19. (Currently Amended) An expression vector or a recombinant live microorganism comprising an isolated polynucleotide according to <u>claim 15 any one of claims 15 18</u>.

- 20. (Currently Amended) A host cell comprising the expression vector of claim 19 or the isolated polynucleotide of claims 15 to 18.
- 21. (Currently Amended) A process for producing a polypeptide of <u>claim 9</u> elaims 9 to 14 comprising culturing a host cell <u>comprising a polynucleotide comprising a nucleotide sequence encoding a polypeptide that has at least 92% identity to the amino acid sequence of SEQ ID NO:2, over the entire length of SEQ ID NO:2; or a nucleotide sequence complementary to said isolated polynucleotide of claim 20 under conditions sufficient for the production of said polypeptide and recovering the polypeptide from the culture medium.</u>
- 22. (Currently Amended) The use of a polypeptide or a polynucleotide as claimed in any of claims 9 to 18 in the manufacture of an An immunogenic composition for immunotherapeutically treating a patient suffering from or susceptible to prostate cancer or other P501S-associated tumours or diseases comprising a polypeptide of claim 9.
- 23. (Original) A method of inducing an immune response against human P501S having an amino acid sequence as set forth in SEQ ID NO:5 to SEQ ID NO:7 in a human, comprising administering to the subject an effective dosage of an immunogenic composition comprising a xenogeneic form of said human P501S.
- 24. (Curently Amended) The method of claim 23, wherein said immunogenic composition comprises a xenogenic P501S polypeptide or a fragment thereof. is according to any of claims 1 to 5.
- 25. (Currently Amended) The method of claim 23, wherein said xenogeneic form of human P501S is the rat P501S as elaimed in any of claims 9 to 14., which has at least 92% identity to the amino acid sequence of SEQ ID NO:1 over the entire length of SEQ ID NO:1
- 26. (Original) The method of claim 23, wherein said xenogeneic form of human P501S is selected from the group consisting of the mouse P501S having the sequence as set

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forth in SEQ ID NO:10 and the Cynomolgus monkey P501S having the sequence set forth in SEQ ID NO:3.

- 27. (Currently Amended) The method of <u>claim 23any of claims 23 to 26</u>, wherein said immunogenic composition includes a live viral expression system or a plasmid vector which expresses said xenogeneic antigen, of through antigen loaded dendritic cells.
- 28. (New) The method of claim 23, wherein said immunogenic composition comprises a xenogenic P501S-encoding polynucleotide or a fragment thereof.